Message

From: Sauerhage, Maggie [Sauerhage.Maggie@epa.gov]
Sent: 2/20/2019 9:04:10 PM
To: AO OPA OMR CLIPS [AO_OPA_OMR_CLIPS@epa.gov]
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Air
Bloomberg Environment: EPA Gets Day in Court to Defend Toxic Air Pollution Stance
The Hill: EPA: Carbon dioxide from power plants rose last year
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Trump administration to end fuel economy talks with California: official

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(Opinion) Because all lives are precious, evangelical Christian opposes weakening mercury rules

Asbestos
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US NGOs file suit over EPA asbestos petition denial

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The Lost Generation

Enforcement
E&E: Seafood giant to spend up to $23M on fixes, EPA says
Washington Post: Environmental group seeks EPA documents on Minnesota mine

Environmental Education
Feedstuffs:
EPA, FFA sign MOU to advance education outreach

PFAS
Burlington County Times:
Editorial: We're off to the races on PFAS

Inquirer: Opinion: Hold EPA to its promise to address dangerous threats to drinking water | Editorial
The Progressive Pulse:
Chemours, DEQ, Cape Fear River Watch hammer out final consent order on GenX, PFAS contamination

Superfund
Associated Press:
Fouled waters reveal lasting legacy of US mining industry

Water
Agri-Pulse: W
OTUS commenters struggle to assess impacts of proposal

Bloomberg Environment: EPA Has Room for Improvement on Stormwater, Report Says
Inside EPA:
Broad EPA Water Trading Guide Seen Boosting New Programs' Prospects

UtilityDive: Supreme Court Clean Water Act case could have big impact on coal ash disposal

Bloomberg Environment
EPA Gets Day in Court to Defend Toxic Air Pollution Stance
https://news.bloombergenvironment.com/environment-and-energy/epa-gets-day-in-court-to-defend-toxic-air-pollution-stance
Amena H. Saiyid
February 20, 2019

- Oral arguments set for April 1 before D.C. Circuit
- Lawsuit revolves over relaxing toxic air pollution controls for industries that emit below a threshold

The EPA will get its day in court April 1 to defend relaxing toxic air pollution control requirements for power plants, refineries, and other industrial sources that bring their emissions below certain thresholds.

The U.S. Court of Appeals for the District of Columbia Circuit on Feb. 19 scheduled oral arguments in a lawsuit brought by environmental groups challenging the Environmental Protection Agency's new policy.

Clean Air Act emissions control requirements for toxic air pollution kick in for large industrial facilities that emit at least 10 tons per year of a single hazardous pollutant or 25 tons of two or more air toxics. Facilities emit below that limit don't have to meet the most stringent pollution control requirements.

The EPA had previously said that large industrial facilities must continue to operate their toxic air pollution controls even if they eventually reduced their emissions below the threshold for regulation, EPA air chief Bill Wehrum in a January 2018 memo reversed that 1995 policy.

The EPA plans to issue a proposed rule this year that builds on that memo. The policy is supported in court by national industry groups representing industrial boilers, electric utilities, oil companies chemical manufacturers, and automakers.

Challenging the EPA in court will be California and a coalition of environmental groups that sued the agency in March. They claimed the EPA's change in approach is illegal because it was made without public comment and would result in increased toxic air pollution.

The case being heard is Calif. Cmties. Against Toxics v. EPA, D.C. Cir., No. 18-1085, 2/19/19.

The Hill
EPA: Carbon dioxide from power plants rose last year
https://thehill.com/policy/energy-environment/430817-epa-carbon-dioxide-from-power-plants-rose-last-year
Timothy Cama
February 20, 2019

Carbon dioxide emissions from power plants rose slightly last year while overall electricity production grew by a larger factor, the Environmental Protection Agency (EPA) said Wednesday.

As part of its required annual reporting of emissions, the EPA said carbon dioxide output grew 0.6 percent in 2018 over the previous year, to 1.93 billion tons, while electricity generated grew 5 percent, to 23.4 quadrillion British thermal units.

At the same time, nitrogen oxides and sulfur dioxide emissions from the power sector fell, the EPA said, by 4 percent and 6 percent respectively.

The EPA celebrated the decreases.

"These data show that America is enjoying ever cleaner air as our economy grows, and the U.S. continues as a global leader in clean air progress," Bill Wehrum, the EPA's associate administrator for air, said in a statement.

"Through state and federal fulfillment of the Clean Air Act, and advances by the power sector, we've seen significant reductions in key pollutants while electricity generation has increased."

The figures come as the EPA works to roll back numerous climate change and air pollution policies from previous administrations, including the Clean Power Plan and emissions rules for cars.

The power sector's carbon dioxide increase is small in comparison to the economy as a whole. The Rhodium Group estimated in January that economy-wide greenhouse gas emissions grew 3.4 percent in 2018 over the previous year.

Electricity generation is tied with transportation as the largest source of greenhouse gas emissions in the United States, at 28 percent, according to the EPA.

But generation emissions have been on a downward trend as a portion of the whole, and transportation has been increasing.

Reuters
Trump administration to end fuel economy talks with California: official
https://www.reuters.com/article/us-autos-emissions-california/trump-administration-to-end-fuel-economy-talks-with-california-official-idUSKCN1Q9273
2/20/2019

WASHINGTON (Reuters) - Federal officials have decided to end negotiations with California over the Trump administration's plans to roll back fuel economy rules designed to reduce greenhouse gas emissions, a government official said on Wednesday.

California and 19 other states have demanded the Trump administration abandon a proposal made in August to freeze fuel efficiency standards after 2020 and strip California of the ability to impose stricter rules.

Detroit automakers have the most at stake. General Motors, Ford Motor Co and Fiat Chrysler Automobiles generate most of their global profits from sales of fuel-thirsty large pickup trucks and sport utility vehicles in the United States. All three have discontinued or planned to drop small and medium-sized sedans from their lineups to focus on trucks and SUVs.

The California Air Resources Board, which did not have an immediate comment, has been meeting with officials from the White House, U.S. Environmental Protection Agency and Transportation Department over Trump administration efforts to stop California from tightening vehicle emissions rules in the state.

The government official, asked about a report by the Daily Caller News Foundation, offered no further details on the end of the talks and it was not immediately clear when an announcement would be made.

California officials already have filed suit to block the Trump administration proposal to roll back federal fuel economy targets for 2022-2025. It is not clear how the industry would respond to the formal adoption of Trump's proposed freeze, and likely litigation by California and other states.

California's top clean air regulator, California Air Resources Board Chair Mary Nichols, last year said the state was willing to give automakers more flexibility to comply with vehicle greenhouse gas limits.

Fiat Chrysler declined comment. General Motors, Ford and the Alliance for Automobile Manufacturers did not immediately respond to a request for comment for this story.

Ford had floated a compromise proposal to other automakers with Executive Chairman Bill Ford Jr. telling Reuters the company was not asking for a rollback but wanted "one national standard."

Trump's proposed freeze would result in 500,000 barrels per day more oil consumption by the 2030s. The administration says it would reduce regulatory costs for automakers by more than $300 billion over the next decade.

Protesters demonstrate against Trump emergency order
The administration was supposed to finalize the new rules by the end of March in order for the softer requirements to take effect by the 2021 model year, but some automakers and officials have questioned if it will meet that deadline.

Most automakers oppose freezing the requirements but also want relief from standards approved during the Obama administration that called for a roughly 5 percent annual reduction in carbon emissions - targets that translate to fuel efficiency requirements for various classes of vehicles.

Reporting by Steve Holland, David Shepardson and Joe White; Writing by Diane Bartz; Editing by Tim Ahmann and Bill Trott

The State
(Opinion) Because all lives are precious, evangelical Christian opposes weakening mercury rules
https://www.thestate.com/opinion/article226482365.html
BY REV. JEREMY SUMMERS
FEBRUARY 20, 2019

The clock is ticking, and it's time for Sen. Graham and Scott to stand up to the reckless actions of the Trump administration's EPA that harm our children, both pre-born and born. On Feb. 7, a proposal to gut the highly successful Mercury and Air Toxic Standard, or MATS, by the Environmental Protection Agency was published in the Federal Register giving us until March 25, to comment on this foolish attempt to harm our kids.

Under MATS, South Carolina has realized an 83 percent reduction in mercury emissions. Mercury is a neurotoxin that, when ingested by pregnant women, crosses the placenta and results in irreversible brain damage in unborn children. The same impacts occur even after birth as mothers can transfer mercury through breast milk. There are no known safe levels of mercury, and even with the current success brought about by the MATS rule, our streams, rivers, lakes and oceans still contain harmful levels of this heavy metal.

Coal-fired electric utilities are America's largest source of mercury. When emitted, the mercury deposits in our water bodies, is consumed by fish and enters our food stream. South Carolina's waters are filled with mercury and there are fish consumption warnings in almost all our waters. The threat to our children is very much alive.

As an evangelical Christian, I believe that all human life is sacred; that each person conceived is of equal and innate value, and that all human life is worthy of protection. Jesus said, "Let the little children come to me, and do not hinder

them, for the kingdom of heaven belongs to such as these" (Matthew 19:14). Our commitment to Jesus Christ compels us to do all we can to protect unborn children from mercury poisoning. It is a pro-life concern, plain and simple.

Acting EPA Administrator Andrew Wheeler has tried to downplay the changes, yet faith groups like ours, public health groups like the American Lung Association and even the utility industry are not fooled. With 99.9 percent of American utilities already having operational mercury removal systems, the utilities see a high dollar amount of stranded assets that will not be recoverable if the rule is gutted.

Perhaps the most damaging element of the whole effort, though, is that the proposed changes would exclude co-benefits or ancillary benefits from the rule's cost-benefit analysis. This contradicts guidelines to federal agencies issued by the George W. Bush administration in 2003, which state: "Your analysis should look beyond the direct benefits and direct costs of your rule-making and consider any important ancillary benefits and countervailing risks." If they are excluded in MATS, this would set a very damaging precedent.

Mr. Wheeler's MATS revision does not square with our faith or the faith of millions of pro-life Americans. All God's children deserve the right to "have life, and to have it to the full" (John 10:10). If Mr. Wheeler continues to undermine the mission of the EPA to protect human health, then we ask senators on both sides of the aisle to reject his nomination as EPA administrator.

Jeremy Summers of Clemson is chair of the board of The Evangelical Environmental Network.

Chemical Watch
https://chemicalwatch.com/74478/us-ngos-file-suit-over-epa-asbestos-petition-denial
US NGOs file suit over EPA asbestos petition denial
By Kelly Franklin
20 February 2019

A group of public health groups has filed a lawsuit in an effort to overturn the US EPA's denial of its petition to require expanded reporting on asbestos.

Filed in the US District Court for the Northern District of California, the lawsuit centres around a petition submitted under section 21 of TSCA in September 2018. This had sought for the EPA to amend its TSCA Chemical Data Reporting (CDR) rule in order to eliminate exemptions and expand reporting of asbestos.

The EPA, however, denied the petition in December 2018. In its response, the agency claimed it was aware of all ongoing uses of asbestos and said that making the proposed changes would not result in generating any new information prior to the deadline later this year for finalising its risk evaluation of asbestos.

But the NGOs argue in their complaint that the EPA's denial of the petition was "arbitrary and capricious and contrary to law".

Bob Sussman, a counsel for the organisations, added: "The petition denial is a weak and irresponsible response to the compelling case we made for the need for comprehensive and current information about asbestos to meet the requirements of the law and fully inform the public."

The groups are seeking for the court to compel the agency to begin a rulemaking under section 8 of TSCA to require importers, manufacturers and processors of asbestos and asbestos-containing articles to report on those uses.

Rebuttal
The NGOs' complaint reiterates several points made in a 31 January rebuttal and request for reconsideration sent to EPA acting administrator Andrew Wheeler.

The letter – signed by the Asbestos Disease Awareness Organization (ADAO) and submitted alongside a separate asbestos petition filed by more than a dozen US state attorneys general – claimed EPA has overstated its knowledge of asbestos use and exposure.

And it countered that, even if information under an amended CDR rule was not collected until after the risk evaluation was complete, such data could inform a future rulemaking to restrict asbestos use and provide information about possible exposures.

The letter asks the EPA to reconsider its position on the NGOs' original request alongside its consideration of the states' petition.

An EPA response to the state AGs' petition is due by 1 May.

E&E
ASBESTOS: EPA denied public's right to know about exposure – lawsuit
https://www.eenews.net/greenwire/2019/02/20/stories/1060121603
Cecelia Smith-Schoenwalder
February 20, 2019

Public health advocacy groups this week sued EPA over its decision to deny a petition aimed at increasing asbestos reporting requirements.
"We cannot afford to stand by while EPA irresponsibly abdicates its duty to protect public health and consumer safety," said Linda Reinstein, president and co-founder of the Asbestos Disease Awareness Organization (ADAO).

"Americans have the right to know how much asbestos is present in their homes, schools, workplaces, and communities; where it's being used; and the potential for exposure to workers and the public," Reinstein continued in a statement.

The petition sought changes to EPA's Chemical Data Reporting Rule that the groups said would increase asbestos reporting. The amendments would also provide EPA with asbestos use and importation data they said the agency needs for the substance's ongoing risk evaluation.

EPA recently denied the petition, stating that it "does not believe that the requested amendments would result in the reporting of any information that is not already known to EPA" (Greenwire, Feb. 12).

The agency added that even if it thought the proposed amendments would bring in new information, it would not be able to finalize the changes in time for use in the ongoing risk evaluation.

"The petition denial is a weak and irresponsible response to the compelling case we made for the need for comprehensive and current information about asbestos to meet the requirements of the law, and fully inform the public," said Bob Sussman, a former EPA official who served in the Obama administration and is now providing legal counsel for ADAO.

Fifteen attorneys general last month filed a similar petition against EPA (E&E News PM, Jan. 31).

Joining ADAO in the lawsuit are the Environmental Working Group, the American Public Health Association, the Center for Environmental Health, the Environmental Health Strategy Center and Safer Chemicals, Healthy Families.
EPA does not comment on pending litigation.

New York Magazine
The Lost Generation
Trump's environmental policies are putting the health of American children at risk.
http://nymag.com/intelligencer/2019/02/trump-epa-risking-health-of-american-children.html
By Stephen S. Hall

2/20/2019

Monterey County, in Northern California, is one of those places that appear to tell a tale of two Americas. The part that runs along the Pacific coastline, from Pebble Beach and Carmel in the north down to Big Sur, is breathtaking and breathtakingly affluent. Travel 20 miles inland, over a narrow ridge of mountains, and you end up in the Salinas Valley, informally known as the Salad Bowl of the World, which is greened by endless rows of lettuce, cauliflower, and broccoli erupting out of rich brown soil and tended by a predominantly immigrant and poor community of farmworkers. Some of those fields run practically up to the main entrance of Natividad Medical Center in the town of Salinas, where, more than two decades ago, an environmental epidemiologist named Brenda Eskenazi came to study the effects of pesticides on children's brain development. If there is a comforting illusion that barriers — be they a ridge of mountains or sheer wealth or a "wall" — can somehow seal off the dangers of modern life, the data that Eskenazi and her colleagues at the University of California, Berkeley, have produced tell a different story.

Sitting in an office on the grounds of the Natividad center recently, Eskenazi, by turns caustic and conscientiously precise, jokes that she could not have picked a more inconvenient group of experimental subjects. More than half of the primarily Latina mothers she and her team began studying in 1999 lived at or below the poverty level, 85 percent of them came from Mexico (some of uncertain immigration status), almost none of them spoke English, and they were scattered across 100 miles of rich agricultural real estate — "in a place," says Eskenazi, a native New Yorker, "where there's no public transportation." Despite the inconvenience, these women and their children helped the Berkeley group make a series of alarming discoveries: Elevated levels of pesticide exposure in the womb were linked to neurological delays and autismlike symptoms in 2-year-olds; by age 7, the children with the highest exposures showed behavioral problems and a loss of IQ; by age 14, the link to autism-spectrum traits persisted; and researchers continue to assess these problems in older teens who return for assessments at 18 years old. Other research has found traces of the same pesticides to be ubiquitous in the U.S. population, and no one yet knows what a safe level of exposure might be.

It's a cliché to say children are the most vulnerable members of society, but over the past three decades, scientists have established this as a physiological fact. Children eat more food and drink more water per unit of body weight than adults. They breathe more rapidly (and tend to breathe that air close to the ground). Those facts alone make children particularly susceptible when they are exposed to chemicals and pollutants. But that is especially true in the prenatal period and during early childhood, when the brain undergoes tremendous development.

Eskenazi's project — the Center for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study — was part of a wave of epidemiological studies launched in the late 1990s to explore the possible effects of environmental chemicals and toxins on fetuses and children. Eskenazi and her fellow scientists across the field have amassed an increasingly consistent, grim picture of possible neurological harms from a variety of environmental poisons, including chemicals found in agricultural pesticides (that also turn up in food), microscopic particles of carbon and other pollutants in the air, barely detectable levels of lead in the water — all are toxins that travel across state lines and abide by no barriers, socioeconomic or otherwise. In 2012, David Bellinger of Harvard's school of public health published an eye-popping analysis of the impact of just three toxins — lead, methylmercury, and organophosphate pesticides — on neurological development, concluding that American children between the ages of 0 and 5 had suffered a collective loss of more than 41 million IQ points because of their environmental exposure. That may not sound like a lot when spread across 24 million children, but Bellinger analyzed only three types of toxicants out of an estimated 40,000 chemicals currently in use, many of which have not been studied in children to the same extent.

It's hard to underestimate the impact of this research. Until the mid-1990s, regulatory agencies had calculated health risks based on studies of adult males; children didn't become part of the calculus until 1996, when Congress mandated they be considered. And not until 2016, after years of "hotly debating" the issue, according to a former EPA official, did the agency finally embrace epidemiological studies, for the first time, in its decision to ban virtually all uses of chlorpyrifos, an organophosphate pesticide among the chemicals in use during Eskenazi's Berkeley study. It was a huge moment for the scientists who study children's environmental health.

The celebration was short-lived. Almost immediately after taking office, Trump's first EPA administrator, Scott Pruitt, overturned the proposed ban on chlorpyrifos — a decision that Columbia University scientist Virginia Rauh, in a commentary for The New England Journal of Medicine, said "may be putting an entire generation of young brains in harm's way." Since then, the EPA has relaxed air-pollution standards, proposed rolling back regulations on mercury emissions, and introduced a plan for lead poisoning that critics say turns back the clock 20 years — all acts concerning toxins that epidemiologists have flagged as harmful to children. At the same time, the agency overhauled the regulatory process to diminish scientific input. Beginning last summer, the EPA requested raw data from Eskenazi and other scientists whose research has shown adverse neurological effects in children; public health experts view the move as a hostile act meant to either discredit or exclude the findings from consideration in setting federal health standards. And in September, the EPA abruptly placed Ruth Etzel, its highest-ranking (and most tenacious) advocate for children's health, on administrative leave. It was, writ large, an attempt to purge the science that has established compelling evidence of environmental harms to the neurological development of children throughout the country.

The story of how epidemiology has revealed "silent epidemics" in children, and how the Trump administration is systematically denigrating that child-centric science, begins and ends with lead poisoning. In 1979, in The New England Journal of Medicine, Harvard scientist Herbert L. Needleman published the results of the first study laying out the public-health implications of minuscule lead exposures — cognitive delays, behavioral anomalies, and lower IQ. Those results highlighted a debate that has roiled environmental science ever since: Epidemiology had revealed that low levels of lead exposure caused brain damage in children, whereas most traditional toxicology experiments — conducted on animals — had not.

After Needleman's work, laws requiring reductions of lead in gasoline and paint led to dramatic declines in the amount of lead in the blood of virtually every American child. The Flint water crisis notwithstanding, reduction of environmental lead is widely considered one of the public-health triumphs of the past half-century. But Needleman paid dearly for it.

Gasoline and chemical companies like E.I. DuPont, Dutch Shell, and the Ethyl Corporation of America attacked the lead studies as inconclusive and poorly conducted; one scientist allied with the gasoline industry argued that the loss of IQ in children was due not to lead but to their parents' low IQs. Needleman, who had moved to the University of Pittsburgh, later faced allegations of scientific misconduct from industry-associated researchers, prompting a two-year investigation by the National Institutes of Health, in which he was ultimately exonerated. In a bid for "transparency," recalled Philip Landrigan, who headed children's environmental health research at Mount Sinai School of Medicine for three decades, lead-industry representatives gained access to Needleman's raw data and tried to use it to discredit his findings.

The lead findings were debated for more than two decades, and Needleman, denied access to his own research files for two years, emerged a bruised and embittered figure. In a 1992 article for the journal Pediatrics chronicling his travails, Needleman made clear he felt like the victim of a witch hunt; the title was "Salem Comes to the National Institutes of Health." "Needleman was hounded," said Lynn R. Goldman, dean of the Milken Institute School of Public Health at George Washington University. "But by the time it was all done, there were a dozen other studies showing exactly the same thing." By 2012, the Centers for Disease Control and Prevention concluded there was no safe level of lead exposure, in part because its deleterious effects were irreversible.

In April 1979, in the same week the New England Journal paper on lead poisoning came out, Eskenazi interviewed with Needleman for a job at Harvard. Eskenazi — a proud alumna of Flushing High School, Queens College, and Woodstock Nation (she attributes her original interest in neuropsychology to watching a young man at the music festival who dove headfirst into the pavement while tripping) — had just gotten a Ph.D. at the City University of New York, and one of her first research projects focused on lead. She didn't get the job, but she and a new generation of environmental epidemiologists considered Needleman's paper revolutionary. "It was like the first really good study to do what we were doing," she recalls.

Eskenazi went on to join the faculty at UC Berkeley. In 1998, the National Institute of Environmental Health Sciences and the EPA began to fund ambitious research projects on children's health, and her CHAMACOS study was among the first. The Berkeley researchers chose the Salinas Valley, which generates some $4.4 billion worth of lettuce, produce, and fruit each year, in large part because the mild, Mediterranean-like weather extends the growing season to 11 months. "We

might lose families more easily in the Central Valley, whereas in the Salinas Valley they were more likely to stay put," Eskenazi explains. As is standard in human-subject research, the Berkeley group baked in absolute privacy protections, including a "certificate of confidentiality" from the NIH pledging that the researchers could not "be compelled to reveal to anyone outside of the study the identity of study participants or information about them." By 1999, the group had recruited 601 pregnant women to join the study; in 2000, the first children were born.

Since then, the Berkeley group has collected upwards of 350,000 biological and environmental samples — blood, urine, breast milk, saliva, and even household dust — from participants and has published more than 150 papers on the health effects on children of environmental toxins, including elevated levels of organophosphate (or OP) pesticides, which account for roughly 70 percent of all pesticide use in the U.S. There was good reason to study OP pesticides: They block an enzyme in nerve cells, essentially causing a synaptic stutter of hyperstimulation. That nervous-system frenzy makes for a highly effective insecticide, but in animal experiments, researchers have shown that this class of chemicals disrupts the formation and proper function of synapses, which are crucial to brain function. The Berkeley group found an association between in-utero exposure to OP pesticides and adverse neurological effects, including loss of IQ, cognitive deficits, behavioral issues like lack of attention, and respiratory problems. The effects are long-lasting, Eskenazi said, "from early age into the teens."

Other research groups from that era, funded by both the NIEHS and the EPA, have reported similar findings. As any savvy consumer of medical news knows, correlation does not equal causation, and single studies should be viewed with caution, but as Eskenazi and others noted in a commentary published last fall, 26 of 27 studies have found a link between OP-pesticide exposure and adverse neurological effects in children. As Harvard's Bellinger put it, "What's important is the weight of evidence that accumulates, study after study … If all that kind of evidence together seems to be telling a consistent story, then I think the inference of causality becomes progressively more tenable."

Studies relying on brain imaging to show the effects of environmental toxins on a child's neurological development have only reinforced that link. In 1997, Virginia Rauh, deputy director of the Columbia Center for Children's Environmental Health, and her colleagues began studying the prenatal effects of exposure to airborne pollutants on a group of pregnant women who lived in Washington Heights, central Harlem, and the South Bronx. Part of their study focused on chlorpyrifos. It is the most widely used insecticide in the country, according to the EPA, even though its use has declined since Rauh and Eskenazi began their studies; farmers use it on everything from Georgia peaches and California tree nuts to Kansas corn and Christmas trees grown in Oregon. The women in the Columbia study, mostly African-American or of Dominican ancestry, encountered chlorpyrifos because it was also widely used at the time as the active ingredient in household insecticides, including Raid. EPA scientists became so concerned about the possible health effects that in 2000 the agency began to phase in a ban on most residential uses of the chemical.

The Columbia group has followed approximately 370 children who were born to women exposed during pregnancy. Every few years, they bring the children in for psychological and cognitive tests and, more recently, brain-imaging sessions with an MRI machine. In a series of papers, Rauh and her colleagues have documented a link between higher levels of exposure to chlorpyrifos in the womb and early cognitive and behavioral deficits. MRI images showed that children with the highest prenatal exposure had structural "anomalies" in parts of the brain involved in attention, language, and executive function; Rauh is reluctant to call them abnormalities, because no one knows exactly what they mean. But the study showed, Rauh says, "significant differences, years later, in structural characteristics of the brain" between kids who had high versus low pesticide exposure in the womb. In some cases, higher exposure to chlorpyrifos in the womb was linked to surprising changes in brain architecture: females exhibited structural features typical of the male brain and males exhibited features typical of female brains. More recently, the Columbia researchers have reported that about 40 percent of the children who had the highest exposures to chlorpyrifos in the womb exhibited "mild to moderate tremor" in at least one arm.

The insidious thing about environmental toxins is that they can turn up far from farm fields or cockroach-infested housing units. The National Health and Nutrition Examination Survey, a research project conducted by the CDC, has consistently detected the breakdown products of OP pesticides in the urine of a random sample of Americans. "It's not like the exposures that the farmworkers are getting are so outside of the realm of possibility of the general U.S. citizen,"

says Eskenazi. "They're also getting exposure from residues in food, just like we are." Chlorpyrifos, Rauh adds, is widely used on golf courses.

At the start of 2015, around the same time the tremor findings came out, Ruth Etzel, a pediatrician and international leader in children's environmental health, became head of the EPA's Office of Children's Health Protection. Although this was a tiny 15-person office in a vast 15,000-employee bureaucracy, Etzel had the ear of top officials at the agency. She had monthly one-on-one meetings with EPA administrator Gina McCarthy and weighed in on the robust, wide-open scientific debates McCarthy famously convened to reach consensus on safe health standards. Etzel soon found herself involved in the long-running debate about the proposed ban on chlorpyrifos.

In 2007, two public-interest groups petitioned the EPA to ban all uses of the pesticide, arguing that there was no safe level of exposure in food. That triggered a legitimate debate within the EPA about whether the agency should weigh epidemiological studies more heavily than animal testing to establish safe health standards. Chlorpyrifos emerged as the test case. EPA scientists and administrators concluded in November 2016 that the epidemiological findings out of Columbia, Berkeley, and elsewhere warranted a total ban on chlorpyrifos. "Everybody was in agreement that it should be banned," Etzel recalled during several interviews last fall, "because the scientific data were so compelling. There were no dissenters at EPA that I'm aware of, at least not that were in our discussions."

The whole process for determining health risks changed with the arrival of the Trump administration. Pruitt took over as EPA administrator in February 2017 and immediately struck a new tone: Industry had a more prominent presence (Dow, the manufacturer of chlorpyrifos, contributed $1 million to the Trump inauguration fund), and career staff were reduced to being spectators at Pruitt's weekly staff meeting.

"The nonpolitical people were just there to listen," says Etzel, one of about 15 top-echelon career officials who attended the meetings. Secrecy was in, and science was out. Pruitt installed a $43,000 soundproof phone booth in his office, and security guards limited access to a long corridor on the third floor that led to the EPA administrator's office, according to Elizabeth Southerland, who resigned in 2017 after 33 years at the agency and now consults with the Environmental Protection Network, an organization of former EPA employees. She said only political appointees were typically allowed to pass the Pruitt checkpoint.

"Scientists just became irrelevant at the agency," Southerland said, "because we were not allowed in the room where the decisions were being made." The freeze-out extended to the Office of Children's Health Protection; rather than having the ear of the EPA administrator, Etzel says, "the meetings stopped altogether." Her supervision was reassigned to the acting deputy chief of staff, and she never again met one-on-one with the EPA administrator.

Pruitt's reversal of the planned total ban on chlorpyrifos was an explicit repudiation of the epidemiological studies. "By reversing the previous administration's steps to ban one of the most widely used pesticides in the world," Pruitt said in announcing the decision, "we are returning to using sound science in decision-making — rather than predetermined results." An EPA press release dismissed the peer-reviewed epidemiological findings as "novel and uncertain," adding that "reliable data, overwhelming in both quantity and quality, contradicts the reliance on — and misapplication of" — the epidemiological studies.

Scientists just became irrelevant at the agency, because we were not allowed in the room where the decisions were being made.

Chemical and agricultural interests have long insisted that use of the pesticide is both safe and essential. DowDuPont, whose Dow AgroSciences division makes chlorpyrifos, cited "fundamental limitations" in epidemiological studies, and said the Berkeley and Columbia findings were "unreliable and not valid for purposes of regulatory decision-making," according to a company spokesperson.
DowDupont says chlorpyrifos use is supported by "more than 4,000 studies and reports examining the product in terms of health, safety and the environment." And Sonny Perdue, Trump's secretary of the Department of Agriculture, alluded last fall to "significant flaws" in the EPA's 2016 assessment of health risks, adding that "the available scientific evidence

does not indicate the need for a total ban." By contrast, the American Academy of Pediatrics says the evidence of chlorpyrifos's risk to children is "unambiguous."

"We were stunned," Etzel says of Pruitt's decision. "I was not consulted. Nobody in my office was consulted. We learned about the decision when we picked up the newspaper or turned on the radio that day." The courts were stunned too. In August, a three-judge panel of the U.S. Court of Appeals for the Ninth Circuit ordered the agency to reinstate the total ban within 60 days. Earlier this month, the court granted the Trump administration's request to rehear the case.

Despite the chlorpyrifos decision, Etzel, oddly, remained cautiously optimistic about the new EPA regime. "I'm a Midwesterner," she says. "I look at the world through rose-colored glasses." In a three-minute pitch to Pruitt, Etzel pushed the idea of an ambitious federal strategy to eliminate lead poisoning. An estimated 500,000 American children still have elevated levels of lead in their blood. "That is an epidemic in anybody's book," said David Jacobs, chief scientist for the National Center for Healthy Housing, "and requires urgent action." Etzel had been co-chairing a multiagency presidential task force to develop just such a plan since 2016, and she felt Pruitt was genuinely interested in what he called a "war on lead." In fact, he set a June 2018 deadline to present the government's new lead strategy.

But events — including mounting pressure on the scandal-challenged Pruitt to resign — intervened. On July 5, Pruitt was gone, and Andrew Wheeler, a former coal-industry lobbyist who had served as Pruitt's deputy, was installed as acting EPA administrator. As Etzel's staff put it to her, "unusual things were happening."

In late June, just before Pruitt's resignation, Etzel and Eskenazi found themselves together at a scientific meeting in Taipei. Informally voicing the sentiments of the scientific community, Eskenazi implored Etzel not to quit her key regulatory post at the EPA. "We need you there," she said. "We need you to protect the children."

Etzel chuckles when I ask her if she recalls the conversation. "I do, I do," she says, "because so many people felt like we needed to just stand up despite the guerrilla warfare and continue to say what needed to be done."

Although things were "really tough," she told Eskenazi, "I'm going to stay."

And she did — though things only got tougher. EPA administrators, who had defended Pruitt's $43,000 phone booth and $3.5 million taxpayer-supported security detail, began to question the staff of the Office of Children's Health Protection in an apparent attempt, Etzel believes, to find financial irregularities within her department. During the summer, the employees responsible for travel expenses and grants in her office were called to the office of the administrator and, according to her, were "tormented" by the questioning. "Ruth, they're after us," one of her staffers told her. Another amended that impression: "I'm not sure they're after us, but they're after you!"

At the same time, progress on the federal lead initiative appeared to stall, according to Etzel, just as the plan was due to be finalized. The perception among other agencies in the presidential task force, she says, "was that EPA was holding it up. Nobody knew exactly why." In early August, Etzel's standing meeting with her supervisor were permanently canceled without explanation.

No sooner had Eskenazi returned to California from the Taiwan conference than she had her own issues with the EPA. On July 12, she received an email from someone in the EPA's "Pesticide Re-Evaluation Division," asking her to turn over her raw data from the CHAMACOS study; the EPA group wanted "to explore the uncertainty" about how pesticides affected developing brains. Eskenazi immediately referred the inquiry to University of California lawyers.

This request was not an isolated incident. In April 2018, resurrecting tactics from the Needleman era, Pruitt had announced a policy called Strengthening Transparency in Regulatory Science, which stipulated that no research could be used to establish health standards for EPA regulations unless the scientists made their data publicly available. "The era of secret science at EPA is coming to an end," Pruitt declared at the time. (This tactic dates back to the Obama era: Beginning in 2010, the EPA — "spurred by industry," according to an agency source — has repeatedly requested the

Columbia group's data; the university has, while working to accommodate the EPA's request, repeatedly expressed concerns about compromising the confidentiality of study participants.)

Although the idea of transparency sounds reasonable, even desirable, scientists regarded the intent behind the EPA policy as "very misleading and very disingenuous," according to Landrigan, who fought the lead wars of the 1980s before helping to set up the Office of Children's Health Protection. "We have an old saying in epidemiology," Etzel says. " 'If you torture the data long enough, it will confess.' " The real motive, Landrigan said, was "to reanalyze the data and try to come up with different conclusions than the original authors. Another aim, he said, would be to use the data to track down individual study subjects and try to get those people to change their stories. "This happened in the 1970s and 1980s during the lead wars," he said. Lynn Goldman, the dean of the public health school at George Washington University, said, "The thing that is worrisome is that they're doing it because they're trying to destroy you." And epidemiologists have been especially targeted, she said, because "often from epidemiology, we see that things are far more hazardous than the animal data would have predicted."

The surrender of raw data is a particularly sensitive issue to researchers who study children's health, because potential violations of privacy could strip away the anonymity of minors with intellectual disabilities, mental-health issues, or, in the case of the CHAMACOS study, immigration-related concerns. In addition to Eskenazi's, two other research groups, both of which had reported links between pesticide exposure and neurodevelopmental deficits, received requests from the EPA to turn over their raw data during the summer. In Landrigan's view, whether the scientists comply or not, the transparency policy — which is still under review by Wheeler — is a win for the Trump EPA in its attempt to exclude the epidemiological studies from influencing regulations. If the scientists submit their data, they'll open it to attack; if they withhold it on privacy grounds, they will effectively give the agency an excuse to ignore evidence of harms to children when they consider regulations.

Four days after the data request from the EPA, Eskenazi received another bombshell: The office of the director of the NIH informed her that it would not be renewing her $7.5 million grant. She had only a month to secure new funding. She does not believe the NIH decision was politically motivated (an NIH spokesperson said that, "regrettably," the Berkeley study did not meet the requirements of the grant), but the action stunned other researchers, who have described the CHAMACOS study as "groundbreaking" and "a national treasure." "I don't really know why they pulled the money," Eskenazi says. "I lay awake a lot at night, wondering what it was all about."

While Eskenazi scrambled to find new funding to keep the CHAMACOS study afloat, the Trump EPA spent much of August announcing deregulatory initiatives that appeased the fossil-fuel industry — and ignored the science suggesting that those policy changes would perpetuate harm to children.

On August 2, the Trump administration announced its intention to delay emissions standards for cars and light trucks, in effect sanctioning continued high levels of traffic-related air pollution; a growing body of evidence links exposure to it to respiratory problems, early signs of neurodegenerative disease, and even autism-spectrum disorder. On August 21, the Trump EPA opened the door to increased amounts of black carbon and small particulate matter in the air with a planned rollback of restrictions on pollution from coal-burning power plants; even the EPA's own analysis predicts 1,400 more deaths annually due to the increased pollution that will result. And on August 29, the Trump administration took the first step in dismantling Obama-era regulations governing mercury emissions from power plants; scientists have known for decades that developing fetuses are especially susceptible to mercury poisoning. "What became crystal clear to me is that EPA knew full well, because of the robust scientific literature, that chlorpyrifos and mercury and lead were harming the next generation," Etzel says. "And despite that full knowledge, they refused to take action."

Etzel's final battle on behalf of children's health may have been over lead. An August 31 draft of the federal lead policy was circulated internally to members of the president's task force. Etzel declines to discuss any specifics of the lead strategy, but this version represented a retreat from previous versions, according to a source who saw multiple drafts. It abandoned provisions Etzel had argued for, including specific goals for eliminating lead and a specific budget to accomplish those goals. Conspicuously missing were any new regulations.

Throughout August and September, Etzel sent weekly emails requesting a meeting with Wheeler to discuss the lead plan. She was repeatedly told Wheeler was not available. Then, on the morning of September 25, while the rest of the country was gripped by the imminent Brett Kavanaugh hearings, Etzel's scheduler got a call from the acting deputy chief of staff's office, requesting a meeting that afternoon. At 4 p.m., Helena Wooden-Aguilar walked in, paused to compliment one of Etzel's office decorations — a wall hanging from Guatemala — and then slid a piece of paper across her desk. "I'm putting you on administrative leave," she said. Wooden-Aguilar refused to give a reason. "Give me your keys," she said, according to Etzel. "Give me your iPhone and your credit card and your badge. And then I'll walk you out." Two people who appeared to be security personnel were waiting in the hallway, and the three EPA officials escorted Etzel to the door. She is not allowed to communicate with any EPA employees, including her former staff, and she still has not been told, more than four months later, why she was so unceremoniously evicted from her office, although she is still being paid. (The EPA press office did not respond to requests for comment.)

At 5:21 p.m., barely an hour later and still in shock, Etzel fired off a plaintive email to Landrigan and other colleagues, describing what had happened. "I appear to be the 'fall guy' for their plan to 'disappear' the office of children's health," she wrote. First reported by BuzzFeed, the email went viral in the children's-health community.

"Based on all the facts I can see, including the timing of the drafts, it really appears that putting Ruth Etzel on administrative leave was at least partially driven by a desire to remove her from the discussion on lead specifically," said Tom Neltner of the Environmental Defense Fund, who is also on EPA's Children's Health Protection advisory committee. "They'd clearly taken steps backward in the August 31 version, then three weeks later she gets put on administrative leave. That's about the time it takes for a bureaucratic organization to review it, recognize that Ruth would be vocal on the issue, and figure out a strategy to silence her."

In late December, just before the government shutdown, the EPA released the president's long-delayed lead-poisoning plan. The National Resources Defense Council called it a "lead balloon." Neltner said the final document did not amount to a strategy at all. "From my perspective," he said, "the plan goes backwards from where we were in 1999."

There are approximately 4 million children born every year, and roughly 24 million children under 5. They may be the biggest losers. "Anything that opens up exposure of children to myriad factors that have the potential to cause brain injury, reduce intelligence, shorten their attention spans, and diminish their emotional stability is really bad for this country," said Landrigan. "This affects kids in red states, kids in blue states, kids in purple states — everybody's children are at risk."

On January 9, the president formally nominated Wheeler to be the permanent administrator of the EPA. During his confirmation hearing, Wheeler touted the agency's record. "The American public have a right to know the truth about the risks they face in their daily lives," he said, "and how we are responding." The reality, according to Etzel, is that the current EPA has "dismantled the processes" that allowed it to find those truths in the first place.

When I last talked to Eskenazi, she was still working through the logistics of keeping the Salinas study going on a shoestring. She was optimistic that a separate branch of the NIH, the NIEHS, would provide bridge funding to allow data collection to continue. At the same time, she is processing what is happening to her life's work. "I just don't even know how to deal with all the feelings," she tells me. "I can't stand it anymore to know that this is really happening. And that there are ignorant people who are making regulations that are going to affect their own children and their children's children. And they don't care."

*A version of this article appears in the February 18, 2019, issue of New York Magazine.

E&E
Seafood giant to spend up to $23M on fixes, EPA says
https://www.eenews.net/greenwire/2019/02/20/stories/1060121575
February 20, 2019

EPA says one of the nation's biggest seafood companies has agreed to spend up to $23 million to fix serious air pollution issues with its vessels and land-based facilities.

Seattle-based Trident Seafoods will also pay a $900,000 fine for Clean Air Act violations under a settlement agreement filed yesterday in federal court in Alaska.

The company uses ozone-depleting coolants in its refrigerators. While the law requires any leaks to be fixed within 30 days, the government said Trident allowed some leaks to persist for years. EPA said more than 200,000 pounds of harmful gases were released into the atmosphere.

Trident agreed to retrofit or retire 23 refrigeration appliances, install leak detectors and promptly repair leaks.

The settlement is subject to public comment and court approval.

Trident did not immediately return a call seeking comment. — Associated Press

Washington Post
Environmental group seeks EPA documents on Minnesota mine
https://www.washingtonpost.com/national/energy-environment/environmental-group-seeks-epa-documents-on-minnesota-mine/2019/02/19/9b3c1380-3484-11e9-8375-e3dcf6b68558_story.html?noredirect=on&utm_term=.ff0655e70820
Ivan Moreno
February 19, 2019

A Minnesota environmental group filed a federal lawsuit against the Environmental Protection Agency Tuesday, seeking to force it to make public the concerns its specialists have expressed about a copper-nickel mine in the northeast of the state.

Environmentalists worry PolyMet Mining's planned $1 billion mine, which would occupy 19,000 acres in the St. Louis River basin, will create a permanent pollution source from the river into Lake Superior. More than 900 acres of wetlands would also be destroyed, the lawsuit from WaterLegacy alleges.

WaterLegacy attorney Paula Maccabee has said documents she obtained through an open records request showed regional EPA staffers said last fall they had "substantial questions" about the project, before the Minnesota Pollution Control Agency issued final water and air permits for the mine in December. Maccabee said the EPA never filed formal comments about the project, even though they had expressed a desire to do so.

Environmentalists say they have been unable to obtain the EPA's finalized comments that weren't submitted, despite a Freedom of Information Act request. The lawsuit pushed for the release of those documents.

The EPA said in an emailed statement that it does not comment on pending litigation.

Maccabee said the permits issued "would not limit toxic pollutants that would then be discharged into the headwaters of the Lake Superior basin."

The Maryland-based group Protecting Employees Who Protect Our Environment, also known as PEER, filed Tuesday's lawsuit in federal court in Washington, D.C., on behalf of WaterLegacy, which wants to use the EPA's unpublished objections in its litigation challenging the permits for the project, known as the NorthMet mine.

"EPA apparently wants to ensure there is no paper trail evidencing the very real concerns of career professional staff," said Kevin Bell, an attorney for PEER.

Environmentalists say that since President Donald Trump's election, EPA officials have been forbidden from submitting written comments to state regulators about approving air and water permits. The EPA staffers now read their comments over the phone, according to notes taken during calls by employees at the Minnesota Pollution Control Agency.

The EPA is concerned about excess mercury discharge and inadequate monitoring, among other things, according to the MPCA notes, the lawsuit states.

Last month, the matter captured the attention of Minnesota U.S. Rep. Betty McCollum, who issued a statement saying she found it "remarkable" that the EPA did not formally weigh in before the MPCA issued the water and air permits. McCollum, who chairs an appropriations subcommittee with jurisdiction over the EPA, said last month she would ask the EPA to publicly release any PolyMet-related comments.

Construction on the project could start as early as this spring. However, the water and air permits that were granted are being appealed to the Minnesota Court of Appeals.

Feedstuffs
EPA, FFA sign MOU to advance education outreach
https://www.feedstuffs.com/news/epa-ffa-sign-mou-advance-education-outreach
Jacqui Fatka
Feb 20, 2019

U.S. Environmental Protection Agency (EPA) acting administrator Andrew Wheeler signed a first-time Memorandum of Understanding (MOU) with the National FFA Organization to advance educational outreach for EPA's ongoing environmental and public health initiatives.

"Today's MOU will expand EPA's environmental education programs to an important and diverse new audience: the National FFA Organization's 670,000 student members," said EPA acting administrator Andrew Wheeler. "The MOU reflects the importance of agricultural practices in promoting environmental stewardship and builds on our recent collaborations with America's farmers and ranchers."

The MOU said EPA intends to coordinate with FFA on EPA internship opportunities and other opportunities that will help FFA members pursue careers within today's various environmental fields, particularly those relevant to agriculture. EPA also plans to recognize, through EPA's Office of Environmental Education, the important role that FFA plays in school-based education, especially for environmental education and learning, as it carries out its statuary programs. EPA said it also plans to enhance collaboration among regional agriculture advisors, regional environmental education coordinators and local FFA chapters and state FFA associations.

The National FFA intends to work with EPA and others to attract, educate, inspire and prepare students for careers and opportunities within today's various environmental fields. The organization also established under the MOU it will collaborate with EPA to extend reach, access and efficiency of efforts to educate and inform young people of environmental issues and opportunities. FFA also plans to provide feedback to EPA relative to implementation of federal programs for training, resource, guidance and other related purposes.

The MOU also establishes that FFA will work with EPA to provide at least one opportunity, but ideally multiple opportunities for EPA regional officials and others to meet with student and adult leaders of FFA to share messages and obtain feedback. Another goal includes fostering communications between the agricultural education community and EPA to distribute programming, resources, and other information as applicable.

"This agreement between FFA and EPA recognizes how FFA members are ready to be leaders in environmental fields," said National FFA president Luke O'Leary. "Whether it's studying pH levels in soil or running experiments to reduce water runoff, we're active stewards in preserving and enhancing the resources needed to grow our food."

EPA will continue to work with FFA to ensure environmental education is learned and practiced by all Americans to achieve EPA's mission of protecting human health and the environment, EPA said in a statement.

The National FFA organization is made up of more than 670,000 student members as part of local FFA chapters in all 50 states, Puerto Rico, the U.S. Virgin Islands, and Washington, D.C. The FFA's mission is to make a positive difference in the lives of students by developing their potential for premier leadership, personal growth, and career success through agricultural education.

Agri-Pulse
WOTUS commenters struggle to assess impacts of proposal
https://www.agri-pulse.com/articles/11918-wotus-commenters-struggle-to
By Steve Davies
02/20/19

Groups interested in the EPA/Army Corps of Engineers' proposal to rewrite the definition of "waters of the United States" — and there are many — are struggling to get a handle on its impacts.

EPA and the Corps say they can't put a percentage on the extent of waters and wetlands that would not be covered by the Feb. 14 proposal, which carries an April 15 comment deadline. (Many groups and Democratic lawmakers have asked EPA and the Corps to extend the comment period.)

Acting EPA Administrator Andrew Wheeler has consistently said any estimates of waters left unprotected by federal regulations are not reliable, labeling as "misinformation" reports that up to 60 percent of streams could lose protection under the proposal.

"There is no nationwide map that identifies 'waters of the United States,'" he said at the rollout of the proposal Dec. 11. In supplemental materials released at the same time, the agencies said they were "not aware of any means to quantify changes in (Clean Water Act) jurisdiction with any precision that may or may not occur as a result of this proposed rule."

The agencies also said they didn't know "of any map or dataset that accurately or with any precision portrays the scope of CWA jurisdiction at any point in the history of this complex regulatory program. Establishing a mapped baseline from which to assess regulatory changes is likewise impracticable at this time."

But EPA itself put some numbers on the impacts back in 2017 when the proposal was under discussion at the agency. In slides that have since become public through a Freedom of Information Act request by E & E Publishing, the agency cited data from the U.S. Geological Survey and Fish and Wildlife Service to note that ephemeral streams, which would not be covered by the proposal, make up 18 percent all streams nationwide; wetlands that do not abut already jurisdictional waters — and which also would be unregulated — make up approximately 51 percent of the nation's wetlands.

Intermittent, or seasonal, streams, according to the same slides, make up 52 percent of streams nationwide. Those types of waterways are covered under the proposal, but the agencies are asking for comments on whether they should regulate streams that have less than intermittent flow, or whether they should limit their jurisdiction to perennial streams only. Ephemeral waters only flow in response to rainfall or snowfall.

The complicated nature of the proposal has left groups preparing comments scrambling to assess its impacts.

"We will pull as much as we can together in 60 days," said Geoff Gisler, a senior attorney at the Southern Environmental Law Center and the leader of its Clean Water Program. Gisler acknowledges that data from USGS's National Hydrography Dataset, which EPA and the Corps used in their analyses, does not align with data on jurisdictional waters. But he adds, "It's not fair to just throw up our hands and say we can't project the effects of this rule."

Gisler estimates roughly 40-50 percent of streams could lose federal jurisdiction under the proposal. He also says coastal plain wetlands are vulnerable, as are perennial streams if they do not contribute adequate flow to navigable waters.

Kyla Bennett, director of Public Employees for Environmental Responsibility's New England office, put the percentage of vulnerable waterways at 60-90 percent. She said she arrived at the figures based on EPA documents, discussions with current and former federal employees who have worked on wetlands, and her own experience — she has a Ph.D. in ecology and worked for 10 years at EPA doping permitting and wetlands enforcement.

"EPA has an obligation to estimate the losses," Bennett said in an email. "Wheeler cannot simply say that these statements are invalid when his own agency says that incomplete data show a loss of 18 percent of streams and 51 percent of wetlands. This is a huge underestimate, and EPA knows it."

One recently-released analysis of three watersheds in Minnesota, Oklahoma and New Mexico concluded that "a narrower definition of jurisdictional waters proposed by the current administration will have a significant impact on the protection of wetlands and waters nationwide." The analysis also noted "risk is more pronounced for ephemeral and isolated wetlands such as those found in semiarid environments and the glaciated prairie pothole region of the U.S."

The analysis by GeoSpatial Services (GSS) at St. Mary's University of Minnesota did not attempt to quantify the impacts of the proposal nationwide, but did find the number of non-jurisdictional wetlands and stream miles increased markedly under the two scenarios closest to the parameters of the proposed rule.

"More accurate modeling of the final proposed rulemaking can be achieved as additional details become available from the EPA and (Army Corps of Engineers)," the GSS report said. GSS Executive Director Andy Robertson says he lacks the funding for a nationwide analysis.

EPA has not decided whether to extend the comment period, which is due to end April 15. When the proposal was announced, Wheeler said 60 days was enough time.

American Farm Bureau Federation spokesman Mace Thornton said it's been difficult to assess the benefits of the proposal because of the vagueness of the 2015 rule that came before. The Feb. 14 proposal, he said, is "an improvement in clarity for both companies and regulators."

Burlington County Times
Editorial: We're off to the races on PFAS
https://www.burlingtoncountytimes.com/opinion/20190220/editorial-were-off-to-races-on-pfas
2/20/2019

It's a two-horse race. Place your bets.

Maybe we're a little cynical from five years spent watching government's response to the presence of toxic PFAS chemicals in our communities' water supplies. So we recognize that it's a gamble determining which government entity — the U.S. Environmental Protection Agency or the New Jersey Department of Environmental Protection — will defy the odds by substantively addressing an issue that is so vitally important to area residents.

Right out of the starting gate, both the EPA and DEP were running (trotting?) neck and neck at an extremely slow clip in creating drinking water limits and environmental standards for PFOS and PFOA, which were used locally in firefighting foams at military bases, including Joint Base McGuire-Dix-Lakehurst, and which have contaminated water wells used by tens of thousands of residents across the river.

Neither horse seemed to be taking the contest too seriously — until the first turn, when New Jersey's toxicologists in March 2017 recommended a PFOA limit of 14 parts per trillion. The DEP commissioner signed off on it that November. Then, a 13-ppt PFOS limit was recommended last June and accepted last fall.

The DEP horse was clearly out front.

It pulled farther ahead last September, when the agency formally regulated PFNA, a sister chemical, setting a first-of-its-kind limit for the chemical in drinking water. Utilities statewide will begin sampling for it this year.

In January this year, the DEP began its sprint to the finish line when it said it would decide this spring on whether to add PFOS and PFOA to its list of regulated substances in drinking water.

So where is the EPA horse in this race? Lagging, maybe even lame.

Last Thursday, acting EPA chief Andrew Wheeler held a big news conference in Philadelphia to discuss his agency's PFAS action plan, during which he seemed to be working harder at removing the "acting" from his job title than offering up any significant information.

Wheeler announced that any decision on whether to regulate PFOA and PFOS wouldn't happen until the end of the year. To us, that sounds like the EPA could decide at the end of the year to regulate the chemicals. Or it could decide not to.

The substance of what Wheeler said was not dissimilar to what his predecessor, Scott Pruitt, said almost a year ago: that the EPA would "take the next step under the Safe Drinking Water Act process to evaluate the need of a Maximum Contaminant Level for PFOA and PFOS."

Heading in to the backstretch, the EPA horse lost ground at this hastily arranged news conference. We hope we're wrong, because getting the substances listed is crucial for members of our community. Since 2014, PFAS chemicals have been found in the drinking water of more than 70,000 residents in this region and linked to a variety of health impacts. The military has spent millions providing filters and clean water in affected communities, but some residents believe the chemicals have made them sick.

Drinking water standards would help protect residents and provide leverage to those whose water supplies exceed the limit and are seeking compensation.

But lest anyone think the DEP horse is the clear winner, don't run to the wagering window just yet.

Even if the state's limits are formally proposed this spring, it doesn't mean they will be adopted. There will be a 60-day comment period, then the DEP commissioner will have one year to decide to institute them. That would take us until spring 2020 for them to be in place.

Still, our money is on the DEP. The state is a leader nationwide in moving to regulate the PFAS family, and should be applauded for funding and using science to protect its residents, especially in the face of the EPA's blinkers.

Both these horses have a history of taking a long time to actually get across the finish line, so one of them needs to pick up the pace on these regulations.

Who will win? Heck, we just hope one of them finishes.

Inquirer
Opinion: Hold EPA to its promise to address dangerous threats to drinking water | Editorial
https://www.philly.com/opinion/editorials/andrew-wheeler-epa-scott-pruitt-pfas-toxic-chemicals-tom-carper-tom-wolf-pennsylvania-new-jersey-20190220.html
The Inquirer Editorial Board
February 20, 2019

Acting Environmental Protection Agency Administrator Andrew Wheeler's promise last week to attack a dangerous threat to drinking water may have sounded soothing to thousands of residents of Bucks and Montgomery Counties, who have lived with contaminated groundwater for decades. But as U.S. Sen. Tom Carper (D., Del.) pointed out, Wheeler's words cynically masked just another federal government dodge on cleaning up the toxic chemicals because he didn't have a timeline and worse, the EPA did not even commit to actually setting safe standards for the toxic family of chemicals known as PFAS.

Fortunately, by the end of the week, Carper secured a solid commitment from the EPA to set safe drinking water standards by December. The back and forth is emblematic of why EPA must be under constant scrutiny.

PFAS have been found in alarming amounts in suburban Philadelphia. They were left behind by firefighting foam at two former military bases.

Known as per- and polyfluorinated alkylated substances, or PFAS, these chemicals are found in consumer products, such as flame-retardant fabrics and nonstick cookware, as well as firefighting foams used at about 400 military bases across the country, including the old Naval Air Warfare Center in Warminster, Bucks County, and the former Naval Air Station at Willow Grove, in Horsham, Montgomery County.
PFAS have been linked to thyroid and liver disease, low birthrates, low fertility in women and preeclampsia in pregnant women, as well as asthma, high blood pressure, kidney and testicular cancer.
Residents and politicians from both parties have been pressuring the EPA to set PFAS standards since at least 2014 and been met with empty promises.

For example, last year, EPA promised to set a guidance for groundwater cleanups by the fall of 2018. It's the winter of 2019 and there's still no such guidance. Carper pointed out that work on that plan has languished in the Office of Management and Budget since August 2018.

Carper wisely took EPA's timeline commitment with caution, saying in a statement, "It's about time he (Wheeler) showed some urgency on this important issue." And, the ranking Democrat on the Senate Environment and Public Works Committee, Carper said, "I will also keep working to push EPA to accelerate the rest of the measures included in the PFAS Action Plan."

That's good because this is a growing problem. Last year, the Inquirer reported that PFAS-laced groundwater to spread to 22 other towns.

Residents don't have the time for any more stall tactics. Their health is on the line.
Pennsylvania Gov. Tom Wolf in September set up a PFAS "action team" to come up with a strategy to fight the toxins. New Jersey is much further along in setting its own enforceable limits on PFAS.
Despite EPA's commitment to a timeline to set safety limits, states should continue their work in protecting residents. And, state and federal elected officials should stay vigilant in forcing the EPA to set standards not only for safe drinking-water levels of PFAS, but for cleaning them up and for stopping polluters.

The Progressive Pulse
Chemours, DEQ, Cape Fear River Watch hammer out final consent order on GenX, PFAS contamination
http://pulse.ncpolicywatch.org/2019/02/20/chemours-deq-cape-fear-river-watch-hammer-out-final-consent-order-on-genx-pfas-contamination/
By Lisa Sorg
2/20/2019

This is a developing story. Policy Watch has scheduled an interview with NC Department of Environmental Quality Secretary Michael Regan later this afternoon. Look for additional coverage tomorrow.

After receiving 380 public comments on a proposed consent order with Chemours, state environmental regulators are asking a Bladen County judge to sign the final version of the document, which would put it into effect.

The consent order lays out several new requirements for Chemours to analyze monitor and report its emissions and discharges of GenX compounds and other per- and polyfluorinated compounds into the air and water, including the Cape Fear River. The document also requires the company to remove 99 percent of the contamination of the surface water and groundwater at an old outfall at the Fayetteville Works site.

Since drinking water has also been contaminated by GenX and PFAS emanating from the plant, Chemours is required to "provide effective systems to treat drinking water fountains and sinks in public buildings," such as Gray's Creek Elementary School. It also must "ensure that filtration systems are operating properly and are maintained for at least 20 years," at the company's expense.

Chemours has agreed to pay a $12 million penalty, plus $1 million in investigation costs.

Many people living near the Fayetteville Works facility as well as in Wilmington downstream, were unhappy with the draft consent order, including the comparatively small penalty amount for a company that generated $6.6 billion in revenue last year. They also were concerned that DuPont, which was the original polluter before it spun off Chemours, would escape liability. The final consent order clarifies that DuPont can be held liable for past offenses, and that it doesn't insulate either company from third-party litigation. At least two lawsuits have been filed against the company, including one by the Cape Fear Public Utility Authority. CPFUA has asked to join fellow intervenor Cape Fear River Watch in the consent order, but so far that request is still pending.

Since November, when DEQ released the draft consent order the evening before Thanksgiving, the agency has incorporated some public feedback — 15 actions, total — into the final version. Now Chemours must notify downstream utilities of an "accelerated plan" to reduce PFAS contamination in the Cape Fear River. DEQ says it will consult with the utilities before any plan is approved. (See document below for a full list of the additions.)

A draft air permit, currently up for public comment through Friday, would also be incorporated into the order. That requires Chemours to reduce GenX emissions by 99 percent and all PFAS by 99.99 percent by Dec. 31, 2019. The company is installing a $100 million thermal oxidizer and scrubber system to achieve those reductions. Over the past two months, Chemours has been scrutinized by the EPA for the company's role in PFAS contamination. As Policy Watch reported in January, federal officials filed a temporary notice of objection to the company's import of GenX compounds from its facility in Dordrecht, the Netherlands. And last week, the EPA cited the company with several notices of violation related to the reporting of PFAS discharges, emissions, imports and potential health effects of exposure. The EPA has yet to announce any financial penalty for those violations.

Associated Press
Fouled waters reveal lasting legacy of US mining industry
https://www.apnews.com/8158167fd9ab4cd8966e47a6dd6cbe96
By MATTHEW BROWN
2/20/2019

RIMINI, Mont. (AP) — Every day many millions of gallons of water loaded with arsenic, lead and other toxic metals flow from some of the most contaminated mining sites in the U.S. and into surrounding lakes and streams without being treated, The Associated Press has found.

That torrent is poisoning aquatic life and tainting drinking water sources in Montana, California, Colorado, Oklahoma and at least five other states.

The pollution is a legacy of how the mining industry was allowed to operate in the U.S. for more than a century. Companies that built mines for silver, lead, gold and other "hardrock" minerals could move on once they were no longer profitable, leaving behind tainted water that still leaks out of the mines or is cleaned up at taxpayer expense.

Using data from public records requests and independent researchers, the AP examined 43 mining sites under federal oversight, some containing dozens or even hundreds of individual mines.

The records show that at average flows, more than 50 million gallons (189 million liters) of contaminated wastewater streams daily from the sites. In many cases, it runs untreated into nearby groundwater, rivers and ponds — a roughly 20-million-gallon (76-million-liter) daily dose of pollution that could fill more than 2,000 tanker trucks.

The remainder of the waste is captured or treated in a costly effort that will need to carry on indefinitely, for perhaps thousands of years, often with little hope for reimbursement.

The volumes vastly exceed the release from Colorado's Gold King Mine disaster in 2015, when an EPA cleanup crew inadvertently triggered the release of 3 million gallons (11.4 million liters) of mustard-colored mine sludge, fouling rivers in three states.

At many mines, the pollution has continued decades after their enlistment in the federal Superfund cleanup program for the nation's most hazardous sites, which faces sharp cuts under President Donald Trump.

Federal officials fear that at least six of the sites examined by AP could have blowouts like the one at Gold King.

Some sites feature massive piles or impoundments of mine waste known as tailings. A tailings dam collapse in Brazil last month killed at least 169 people and left 140 missing. A similar 2014 accident in British Columbia swept millions of cubic yards of contaminated mud into a nearby lake, resulting in one of Canada's worst environmental disasters.

But even short of a calamitous accident, many mines pose the chronic problem of relentless pollution.

TAINTED WELLS

In mountains outside the Montana capital of Helena, about 30 households can't drink their tap water because groundwater was polluted by about 150 abandoned gold, lead and copper mines that operated from the 1870s until 1953.

The community of Rimini was added to the Superfund list in 1999. Contaminated soil in residents' yards was replaced, and the EPA has provided bottled water for a decade. But polluted water still pours from the mines and into Upper Tenmile Creek.

"The fact that bottled water is provided is great," said 30-year Rimini resident Catherine Maynard, a natural resources analyst for the U.S. Department of Agriculture. "Where it falls short is it's not piped into our home. Water that's piped into our home is still contaminated water. Washing dishes and bathing — that metal-laden water is still running through our pipes."

Estimates of the number of such abandoned mine sites range from 161,000 in 12 western states to as many as 500,000 nationwide. At least 33,000 have degraded the environment, according to the Government Accountability Office, and thousands more are discovered every year.

Officials have yet to complete work including basic risk analyses on about 80 percent of abandoned mining sites on federal lands. Most are controlled by the Bureau of Land Management, which under Trump is seeking to consolidate mine cleanups with another program and cut their combined 2019 spending from $35 million to $13 million.

PERPETUAL POLLUTION

Problems at some sites are intractable.

Among them:

— In eastern Oklahoma's Tar Creek mining district, waterways are devoid of life and elevated lead levels persist in the blood of children despite a two-decade effort to clean up lead and zinc mines. More than $300 million has been committed since 1983, but only a small fraction of the impacted land has been reclaimed and contaminated water continues to flow.

— At northern California's Iron Mountain Mine, cleanup teams battle to contain highly acidic water that percolates through a former copper and zinc mine and drains into a Sacramento River tributary. The mine discharged six tons of toxic sludge daily before an EPA cleanup. Authorities now spend $5 million a year to remove poisonous sludge that had caused massive fish kills, and they expect to keep at it forever.

— In Colorado's San Juan Mountains, site of the Gold King blowout, some 400 abandoned or inactive mine sites contribute an estimated 15 million gallons (57 million liters) of acid mine drainage per day.

This landscape of polluted sites occurred under mining industry rules largely unchanged since the 1872 Mining Act.

State and federal laws in recent decades have held companies more accountable than in the past, but critics say huge loopholes all but ensure that some of today's mines will foul waterways or require perpetual cleanups.

To avoid a catastrophe like Gold King, EPA officials now require advance approval for work on many mining sites. But they acknowledge they're only dealing with a small portion of the problem.

"We have been trying to play a very careful game of prioritization," said Dana Stalcup, deputy director of the Superfund program. "We know the Superfund program is not the answer to the hundreds of thousands of mines out there, but the mines we are working on we want to do them the best we can."

QUESTIONS OVER WHO SHOULD PAY

To date, the EPA has spent an estimated $4 billion on mining cleanups. Under Trump, the agency has identified a small number of Superfund sites for heightened attention after cleanup efforts stalled or dragged on for years. They include five mining sites examined by AP.

Former EPA assistant administrator Mathy Stanislaus said more money is needed to address mining pollution on a systematic basis, rather than jumping from one emergency response to another.

"The piecemeal approach is just not working," said Stanislaus, who oversaw the Superfund program for almost eight years ending in 2017.

Democrats have sought unsuccessfully to create a special cleanup fund for old hardrock mine sites, with fees paid by the mining industry. Such a fund has been in place for coal mines since 1977, with more than $11 billion in fees collected and hundreds of sites reclaimed.

The mining industry has resisted doing the same for hardrock mines, and Republicans in Congress have blocked the Democratic proposals.

Montana Mining Association director Tammy Johnson acknowledged abandoned mines have left a legacy of pollution, but added that companies still in operation should not be forced to pay for those problems.

"Back in the day there really wasn't a lot known about acid mine drainage," she said. "I just don't think that today's companies bear the responsibility."

In 2017, the EPA proposed requiring companies still operating mines to post cleanup bonds or offer other financial assurances so taxpayers don't end up footing cleanup bills. The Trump administration halted the rule, but environmental groups are scheduled to appear in federal court next month in a lawsuit that seeks to revive it.

"When something gets on a Superfund site, that doesn't mean it instantly and magically gets cleaned up," said Earthjustice attorney Amanda Goodin. "Having money immediately available from a responsible party would be a game changer."

Bloomberg Environment
EPA Has Room for Improvement on Stormwater, Report Says
https://news.bloombergenvironment.com/environment-and-energy/epa-has-room-for-improvement-on-stormwater-report-says
David Schultz
February 20, 2019

- Study identifies ways EPA can improve regulations on stormwater flows from factories, other businesses
- Calls on agency to simplify, be more consistent with its regulations, and incorporate new science

The EPA should change the way it regulates stormwater that flows off of factories, gas stations, and other businesses, according to an independent committee of experts commissioned by the agency.

Specifically, they said the Environmental Protection Agency should simplify its regulations and require companies to monitor only three distinct signs of problems with stormwater runoff: pH anomalies, spikes in dissolved material, and drops in the amount of oxygen in water.

Stormwater runoff is one of the largest contributors of pollution to rivers, lakes, and oceans in the U.S. But the experts with the National Academies of Sciences, Engineering, and Medicine said the EPA is too slow at changing the way it regulates runoff to incorporate the latest science, according to their Feb. 20report.

There are several industrial sectors, such as fuel storage facilities and gas stations, where data suggest that stormwater pollution is common but for which the agency hasn't adopted criteria to measure or monitor pollutants, the report found.

That's why the panel suggested the agency instead go with the three signs of runoff pollution because these signs "can serve as broad indicators of poor site management."

The EPA requested that the National Academies study this area to fulfill a 2016 legal settlement agreement with a coalition of environmental groups that sued the agency to change its stormwater regulations.

The settlement agreement was in the case Waterkeeper All. Inc. v. EPA, 2d Cir., No. 15-02091, settlement agreement, 8/23/16.

Inside EPA
Broad EPA Water Trading Guide Seen Boosting New Programs' Prospects
https://insideepa.com/daily-news/broad-epa-water-trading-guide-seen-boosting-new-programs%E2%80%99-prospects
By David LaRoss
February 19, 2019

EPA's reworked guidance for Clean Water Act (CWA) water quality trading programs is drawing enthusiastic support from the wastewater industry and others that have long pushed for broader adoption of such programs, while environmentalists are reacting more cautiously but still welcoming certain elements of the update.

"They took pains to say, 'we meant this to be easier, and we meant this to be done more often.' They covered some really important issues, and in general touched on most of the things that have bedeviled or slowed these projects across the country," says a source with the Environmental Policy Innovation Center (EPIC), a private group that aims to bolster "creative policies" that support infrastructure development and water quality, among other outcomes.

Similarly, an official at the National Association of Clean Water Agencies (NACWA), which represents both wastewater utilities and many municipal stormwater authorities, said the agency's new policy is a sign that officials at the water office "are clearly committed to see market-based programs advance."

But a source with the environmentalist group Chesapeake Bay Foundation (CBF) says some of the principles EPA is outlining in its Feb. 6 guidance "would not fly in the world we work with," such as one that encourages local authorities to let facilities "bank" compliance credits over multiple years.

"I think there's some things to be concerned about from the environmental community's perspective," but some parts of the guidance "make sense," the CBF source says.

EPA unveiled its new trading guide on Feb. 6, replacing a 2003 policy that the agency says turned out to be too limiting on states and local governments looking to create markets for CWA compliance credits, despite its informal nature. In a sharp turn away from that approach, the new policy avoids spelling out the regulatory elements that should be part of trading programs and instead outlines only broad "principles" the agency supports.

"Contrary to the Agency's intent and expectations, the 2003 Policy has not facilitated the widespread adoption of water quality trading. . . . The Agency now believes that the 2003 Policy may be too prescriptive to be widely effective and implementable," the guidance says.

The EPIC source says those criticisms of the Bush-era trading policy and its implementation match what that group and others have seen in practice. "There have been a lot of nutrient trading approaches that have been tried in the last 20 years, and a lot of them have flamed out pretty quickly and never gotten past the pilot stage. A lot of that is because of what's outlined in the memo."

Nutrient Reductions

Some states and local governments have found success with trading programs, largely focused on nutrient reductions. In a typical setup, agricultural operations reduce their nitrogen and phosphorus runoff below legally-required levels, and thus generate credits that can be sold to nearby wastewater, storm sewer and other dischargers that would be unable to cheaply achieve the same reductions at their own facilities.

Such programs have emerged as a key element of compliance with the Chesapeake Bay CWA total maximum daily load cleanup plan, as well as other smaller-scale efforts, but adoption of the practice has been slow compared with similar efforts for air pollution and habitat conservation, among others.

The NACWA source says how EPA will act on the new policy to try and reverse that trend remains uncertain. "We've had some preliminary conversations already with the political team before this memo came out, and now we want to get back in there and chat a little bit more about how we can help implement it," the official says.

But separate from the specific principles EPA is backing in the new policy, the "energy" that the water office is displaying by issuing the new guidance could help bolster wider adoption of trading, that source continues. "We're encouraged by the energy that they're putting behind it."

And the EPIC source says the broad nature of the Feb. 6 guidance could be an asset if it means EPA will be more likely to back local authorities' plans on trading and avoid intervening to block or rework details of those programs.

Uncertainty over federal approval "can doom any project, often completely unintentionally," that source says.

However, both pro-trading sources agreed that concrete changes as a result of the new policy are unlikely to appear soon. "There's definitely a lot of interest in partnerships," not necessarily any projects ready to launch soon given a new federal outlook, the NACWA source says.

Environmentalists' Critiques

The CBF source says environmental groups could push to limit any new trading programs that try to take full advantage of the "flexibility" touted in the new guidance, especially since it lacks the force of binding regulations.

"We're going to be maintaining our vigilance at the state level to just try and make sure there are no efforts to undo what the states have done already" in terms of ensuring that trading programs are protective, the source says.

The environmentalist also noted that the idea of credit-banking appears dubious, because it could permit a facility to sell multiple years' worth of credits at once, allowing for an immediate increase in pollution that would have a more acute impact than multiple years' worth of gradual reductions.

"If you reduce your pollution by 10 pounds a year for three years, you can't then use trading to let somebody else dump that 30 pounds in one year, because really what you're really getting is an annual reduction of 10 pounds," the source says.

However, the CBF source says environmental groups could be more supportive of the new policy's encouragement for "adaptive management" practices that allow for changes in governance based on a program's early results, and a greater focus on municipal separate storm sewer systems (MS4s) as opposed to only targeting wastewater and sanitary sewers.

"We think the real opportunity is in the MS4 space, because it's expensive and it's nonpoint source pollution, and EPA so far hasn't put out much on how MS4s could participate in trading," the source says. -- David LaRoss (dlaross@iwpnews.com)

UtilityDive
Supreme Court Clean Water Act case could have big impact on coal ash disposal
https://www.utilitydive.com/news/supreme-court-clean-water-act-case-could-have-big-impact-on-coal-ash-dispos/548760/
Gavin Bade
February 20, 2019

Dive Brief:

- The Supreme Court on Tuesday announced it will hear a broad case on the Clean Water Act that could have major implications for utility infrastructure, particularly coal ash disposal facilities.
- The case, *County of Maui, Hawaii v. Hawaii Wildlife Fund,* concerns whether the CWA applies to pollution that seeps through groundwater before entering navigable waterways subject to the law. It focuses on a wastewater treatment facility in Hawaii, but lower courts have also provided split decisions on how the CWA applies to such pollution from coal ash facilities.
- Last year, federal circuit courts ruled that pollution from ash facilities owned by the Tennessee Valley Authority and Dominion Energy did not violate the CWA because they were not point sources of pollution. In the Tennessee case, the court said the proper avenue to address the pollution is the Resource Conservation and Recovery Act (RCRA) — another federal law facing litigation.

Dive Insight:
Though the Supreme Court case focuses on discharges from a wastewater treatment plant on Maui, the eventual ruling could have broad impacts on permitting for a variety of energy projects that can release diffuse pollution.

Arguments in the *County of Maui* case reflect similar issues at stake in the coal ash cases. The county argues that wastewater pumped out of the plant does not violate the CWA because it travels through groundwater — not subject to the federal law — before it reaches the Pacific Ocean. The Hawaii Wildlife Fund says the law still applies.

The EPA weighed in on the side of the environmental group during the Obama administration, arguing the CWA has long applied to groundwater if there is a direct hydrological link to a navigable waterway. But the Trump administration is now reviewing that finding and could recommend the court reverse the precedent.

How the court decides could influence billion-dollar disposal decisions for coal ash facilities across the U.S. When TVA lost a lower court decision regarding coal ash at its Gallatin plant in 2017, it estimated the cost of moving the waste to a lined landfill at $2 billion.

TVA won a temporary reprieve last year from the U.S. Court of Appeals for the 6th Circuit when it reversed that decision, holding that "migration of pollutants through groundwater" is excluded from the CWA.

A similar situation played out at Dominion's Chesapeake Energy Center, where the 4th Circuit Court of Appeals last year struck down a lower court ruling that arsenic pollution from ash facilities at the plant violated the CWA.
In that case, the three-judge panel said a "simple causal link" between the groundwater pollution and pollution found in navigable waters "does not fulfill the Clean Water Act's requirement that the discharge be from a point source."

Instead of the CWA, the courts in both cases said this type of groundwater pollution falls within the regulatory scope of RCRA. That law is the foundation of the nation's first federal regulations on coal ash, finalized during the Obama administration, but it is also the subject of legal uncertainty.

Last July, the Environmental Protection Agency announced it would roll back the rule following a court challenge from utility companies, giving states the authority to set disposal standards. But then, in a different case decided in August, the D.C. Circuit Court ruled that the original, Obama-era rule was not protective enough.

Environmental groups in October filed a petition with the U.S. Court of Appeals for the District of Columbia Circuit, arguing it should vacate the offending parts of the EPA coal ash rule and force utilities to take cleanup actions immediately. EPA filed a response in late January, arguing that throwing out the rule could "compromise the reliability of the electric grid," and asking the court to allow utilities to continue compliance efforts for its weakened rule.